

What is claimed is

1. A package structure for a light emitting diode, comprising:
 - a conduction board;
 - an insulation layer disposed on said conduction board;
 - a conductive layer, having an opening, disposed on said insulation layer; and
 - a reflective layer, inserted into said insulation layer through said opening, for supporting and electrically connecting said light emitting diode;wherein said reflective layer is electrically coupled to said conduction board and electrically insulated from at least a portion of said conductive layer.
2. The package structure of claim 1, wherein said reflective layer is further inserted into a portion of said conduction board.
3. The package structure of claim 1, comprising a channel for insulating said reflective layer from said portion of said conductive layer.
4. The package structure of claim 3, wherein said channel insulates said reflective layer from at least two portions of said conductive layer.
5. The package structure of claim 3, further comprising an insulation filling layer for filling said channel.
6. The package structure of claim 1, further comprising an adhesive layer for adhering said light emitting diode to said reflective layer.
7. The package structure of claim 1, wherein said conduction board is a metal board for dissipating heat generated by said light emitting diode, and said metal board has a thickness in a range of about several hundred micrometers to several millimeters.
8. The package structure of claim 7, wherein said metal board is selected from a group consisting of a copper board, an aluminum board, and a combination thereof.
9. The package structure of claim 1, wherein said insulation layer comprises an

insulation adhesive layer including epoxy or Teflon.

10. The package structure of claim 1, wherein said conductive layer is a copper layer having a thickness in a range of about 0.1 to several mils.
11. The package structure of claim 1, wherein said reflective layer has a reflection surface for reflecting lights emitted from said light emitting diode.
12. The package structure of claim 11, wherein said reflection surface comprises a silver surface.
13. The package structure of claim 1, wherein said reflective layer has a slanted cup-like reflection surface.
14. A light emitting device, comprising:
 - a light emitting diode having a first electrode and a second electrode;
 - a substrate sequentially comprising a conduction board, an insulation layer, and a conductive layer; and
 - a reflective layer, inserted into said substrate through said conductive layer, for supporting and electrically coupling to said light emitting diode;wherein said reflective layer is electrically coupled to said conduction board and electrically insulated from at least a portion of said conductive layer, said first electrode and said second electrode of said light emitting diode are respectively electrically coupled to said reflective layer and said portion of said conductive layer.
15. The light emitting device of claim 14, comprising a channel for insulating said reflective layer from said portion of said conductive layer.
16. The light emitting device of claim 15, wherein said channel insulates said reflective layer from at least two portions of said conductive layer.
17. The light emitting device of claim 15, further comprising an insulation filling layer for filling said channel.

18. The light emitting device of claim 14, further comprising an adhesive layer for adhering said light emitting diode to said reflective layer.
19. The light emitting device of claim 14, comprising a metal wire for coupling said second electrode of said light emitting diode with said portion of said conductive layer.
20. The light emitting device of claim 14, wherein said conduction board is a metal board for dissipating heat generated by said light emitting diode, and said metal board has a thickness in a range of about several hundred micrometers to several millimeters.
21. The light emitting device of claim 20, wherein said metal board is selected from a group consisting of a copper board, an aluminum board, and a combination thereof.
22. The light emitting device of claim 14, wherein said insulation layer comprises an insulation adhesive layer including epoxy or Teflon.
23. The light emitting device of claim 14, wherein said conductive layer is a copper layer having a thickness in a range of about 0.1 to several mils.
24. The light emitting device of claim 14, wherein said reflective layer has a reflection surface for reflecting lights emitted from said light emitting diode.
25. The light emitting device of claim 14, wherein said reflection surface comprises a silver surface.
26. The light emitting device of claim 14, wherein said reflective layer has a slanted cup-like reflection surface.
27. A method for assembling a light emitting device, comprising:
 - providing a light emitting diode having a first electrode and a second electrode;
 - providing a substrate sequentially comprising a conduction board, an insulation layer, and a conductive layer;
 - forming an opening in said substrate to expose said conduction board;

forming a reflective layer in said opening, said reflective layer being electrically coupled to said conduction board and electrically insulated from at least a portion of said conductive layer;

electrically coupling said first electrode of said light emitting diode with said reflective layer; and

electrically coupling said second electrode of said light emitting diode with said portion of said conductive layer.

28. The method of claim 27, comprising forming a channel to insulate said reflective layer from said portion of said conductive layer.
29. The method of claim 28, wherein said step of forming said channel comprises forming a plurality of channels to divide said conductive layer into multiple portions, so that said reflective layer is electrically insulated from at least two portions of said conductive layer.
30. The method of claim 28, further comprising forming an insulation filling layer in said channel to electrically insulate said reflective layer from said portion of said conductive layer.
31. The method of claim 27, further comprising forming an adhesive layer on said reflective layer to electrically couple said first electrode of said light emitting diode with said reflective layer.
32. The method of claim 27, comprising forming a metal wire to electrically couple said second electrode of said light emitting diode with said portion of said conductive layer.